

THREE NEW SPECIES OF THYANTA STÅL

(Heteroptera: Pentatomidae)

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During a recent visit to the California Academy of Sciences the author was privileged to examine the collections of Hemiptera housed there. Among the many pentatomids, arranged by the late E. P. Van Duzee, a number of specimens were found that were all classified as *Thyanta perditor* (Fabricius) but which upon close examination showed sufficient differences in form and color to warrant further study. Dr. E. S. Ross, Curator of the collections, kindly allowed me to bring about eighty of these specimens east with me when I returned. From them three new species are hereby being erected. There is perfectly good reason for Van Duzee having identified all as *perditor* for they are, indeed, very similar not only to that species but to one another as well. The first inference that they might be different came from the fact that they were collected from three rather remote localities, i.e. the Galapagos Islands, the Revillagigedo Islands and Baja California. Intensive study of their characteristics reveals the differences stated in the following descriptions.

The ratios given in the descriptions are measurements made through a binocular microscope using a $\times 4$ objective and a $\times 9$ ocular fitted with a micrometer scale divided into one hundred linear units; they are not in terms of millimeters except as mentioned in connection with the holotypes and allotypes.

The diagrams of the parameres are camera lucida tracings of dissected and mounted genitalia and were drawn through a compound monocular microscope.

Thyanta spectabilis Ruckes, new species

(Figures 3, 4)

Size somewhat larger than *T. perditor* (Fabricius) and much more triangular in form; dark tan, sometimes with olivaceous tints.

Head slightly longer than wide through the eyes (50/42), lateral margins a little less sinuate than in *perditor*; punctures coarse and somewhat congested; ocelli moderate in size, farther from the margins of the eyes than

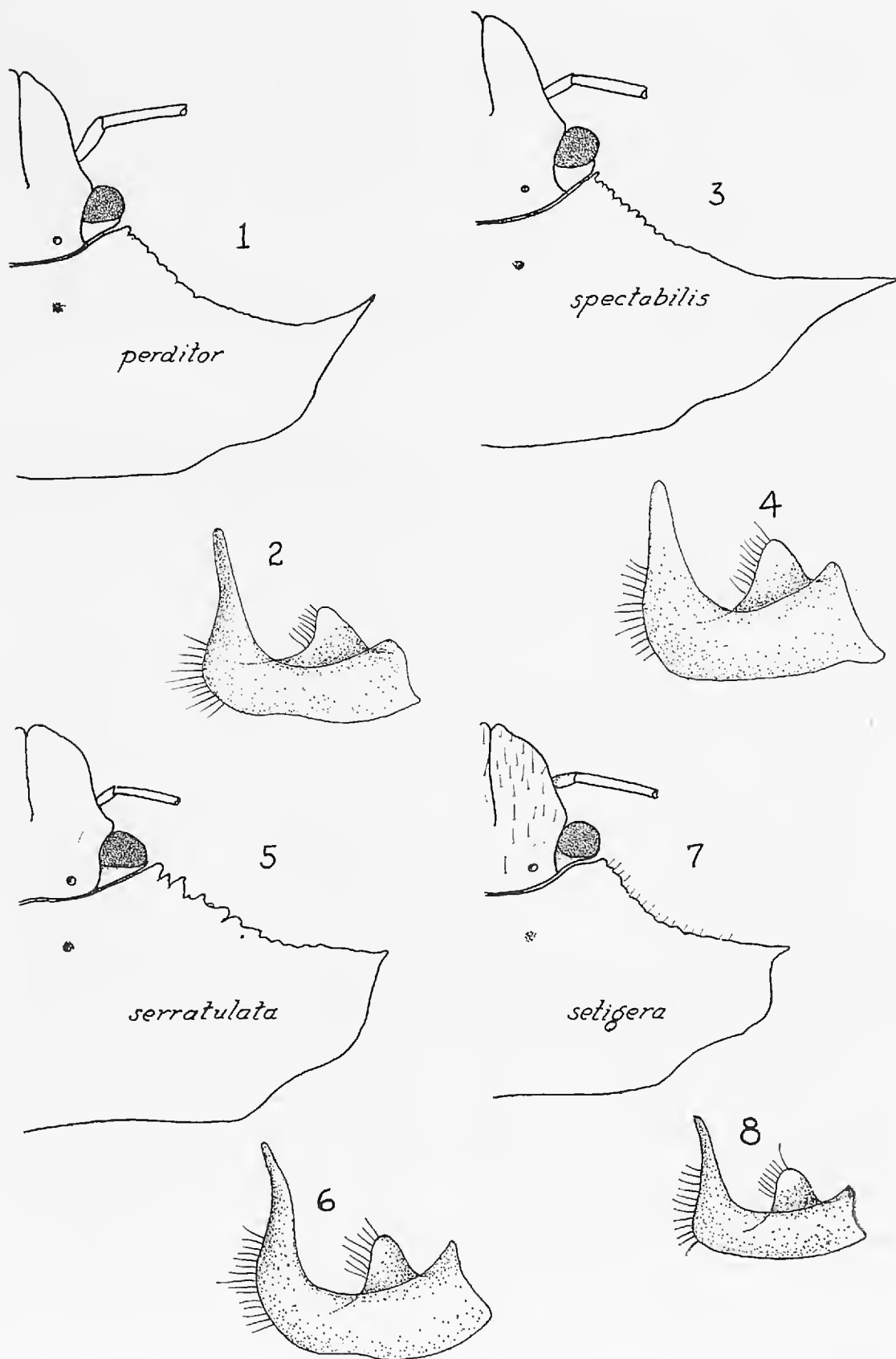
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the diameter of an ocellus; surface of tylus and the disc between the ocelli darker than surrounding areas but not rufous as in *perditor*. Antennal segmental ratios: 10/23/25/29/25, i.e. the terminal four segments essentially subequal, with segment IV slightly longer; segments I, II and basal halves of III and IV dull yellow or yellowish green, the remainder fuscous with segment V slightly paler. *Pronotum* almost three and one-half times as wide across the tips of humeri as long medially (163/47); humeri projected laterally and slightly upward into extremely acute spines, much longer than in *perditor* and not directed forward as in that species (figs. 1, 3); surface two-toned, disc before transhumeral axis dull yellow, disc behind, dark brown; no transhumeral reddish band present as in *perditor*; the humeri themselves are rufous; punctures on anterior yellowish portion finer than those on posterior darker portion where the punctures are somewhat confluent; a vague median longitudinal black pinstripe present anteriorly between the two fuscous cicatrose spots, there traversing a small, raised rugosed area; antero-lateral margins somewhat less arcuate than in *perditor*, more distinctly serratulate and piceous; this piceous border usually continued anteriorly onto margins of head before eyes and posteriorly onto humeri and thence to basal portion of elytra. *Scutellum* slightly longer than wide across base (86/79), coarsely punctate and transversely rugose; color like that of posterior disc of pronotum, sometimes with a paler median longitudinal band present; frenum ends at a point about two-thirds the distance from base; apex moderately rounded. Elytra slightly paler than scutellum, very evenly punctured; numerous small, substellate pale points scattered about; an easily recognized notch on apical edge of corium adjacent to apical angle. Membrane hyaline with numerous brown dots and dashes, veins weakly raised. *Connexivum* widely exposed and strikingly alternated orange-red and black, the latter forming broad bands across the connexivum on each side of the paler segmental incisures. *Venter* dull yellow or tan throughout, sometimes with greenish tints anteriorly and laterally. Abdominal plates coarsely and shallowly punctate medially and much more finely laterally; both basal and apical angles of segments piceous; a row of fuscous to piceous post-spiracular spots present on each side. Legs dull yellow, darkening distally, tarsi tan or pale brown; some longer seta-like hairs interspersed between the short sparse pile on tibiae. Rostrum dull yellow, apical segment piceous and extending onto second (first visible) abdominal segment.

Male genital segment proportionately larger than in *perditor*, parameres more robust as shown in Figures 2 and 4.

Described from two male and six female specimens from Baja California.

Holotype male: (11 mm. long; 9 mm. across the humeri.) ANGELES BAY, GULF OF CALIFORNIA, MEXICO, June 26, 1921; E. P. Van Duzee, collector. Deposited in the California Academy of Sciences. *Allotype female*: (11.75 mm. long; 9.5 mm. across the humeri.) Angeles Bay, Gulf of California, June 26, 1921;



EXPLANATION OF FIGURES

Figures 1, 3, 5 and 7, Right halves of head and pronotum of *Thyanta perditor* (Fig. 1), *T. spectabilis* (Fig. 3), *T. serratulata* (Fig. 5) and *T. setigera* (Fig. 7) to show differences in proportions. Figures 2, 4, 6 and 8, Ental aspects of the left parameres of *Thyanta perditor* (Fig. 2), *T. spectabilis* (Fig. 4), *T. serratulata* (Fig. 6) and *T. setigera* (Fig. 8).

E. P. Van Duzee, collector. Deposited in the California Academy of Sciences. *Paratypes*: One male, same data as above. Deposited in the American Museum of Natural History. Three females, same data as above, two deposited in the California Academy of Sciences, one in the American Museum of Natural History.

***Thyanta serratulata* Ruckes, new species**

(Figures 5, 6)

Similar in size and appearance to *T. perditor* (Fabricius), slightly more broadly obovate; color dull green to brownish olive.

Head slightly shorter than wide through eyes (42/49); more strongly sinuate before eyes and more confusedly punctured than in *perditor*; disc between the ocelli and forward to apex obsolescent reddish or not colored at all; ocelli moderate in size, each farther from inner margin of eye than the diameter of an ocellus. Antennal segmental ratios 10/20/22/25/23, i.e. terminal four segments essentially subequal with segment IV only slightly longer; segment I pale, the remainder concolorous dull yellow-green, sometimes darkening apically. *Pronotum* about three times as wide across the humeri as long medially (137/45); antero-lateral margins serratulate, particularly anteriorly, and terminating at each humerus in a small, slightly forward projecting tooth, not a spine as in *perditor*; surface of pronotal disc transversely rugose as in *perditor* but lacking the transhumeral red band; a fuscous spot at inner corner of each cicatrix, the spot sometimes obsolescent; pronotal margin behind humeral tooth much less oblique than in *perditor*. *Scutellum* equilateral (82/82), coarsely punctured and transversely strongly rugose, especially anteriorly; frenum ends at a point about two-thirds the distance from base; margins of scutellar tongue somewhat convergent to a narrowly rounded apex, this concolorous with remainder of disc. *Elytra* evenly and finely punctured, sometimes provided with scattered pale points; membrane hyaline with only a few, basally placed tan or brown dots. *Connexivum* narrowly exposed, for the most part concolorous dull green or yellowish green, occasionally with marginal blotches of dull orange but not strikingly alternated; only the apical angle of each abdominal segment minutely piceous, incisures between segments not banded with dark color. *Abdominal venter* dull yellowish with a green tinge, punctures concentrated laterally; no post-spiracular piceous or fuscous points present, apical angles of abdominal segments only minutely piceous. Thoracic venter and head concolorous pale yellowish green, femora and proximal portions of tibiae likewise concolorous, distal portions of tibiae and entire tarsi becoming darker, sometimes fuscous. Pile on legs consisting of short stiff hairs, no longer than diameter of tibia, with no seta-like hairs interspersed. Rostrum reaching well beyond metacoxae, usually to the anterior margin of the third (second visible) abdominal segment.

Male genital segment much like that in *perditor*, but surface more deeply impressed laterally, median notch on the apical margin deeper and lateral apical angles more pronounced; apical spur of parameres more attenuated (Fig. 6). Female genital plates similar in the two species.

Described from 13 male and 13 female specimens as follows:

Holotype male: (11 mm. long; 6.5 mm. across the humeri.) CLARION ISLAND, REVILLAGIGEDO ISLANDS, MEXICO, April 28, 1925; H. H. Keifer, collector. Deposited in the California Academy of Sciences. *Allotype female*: (12.75 mm. long; 7.75 mm. across the humeri.) Clarion Island, Revillagigedo Islands, Mexico, April 26, 1925; H. H. Keifer, collector. Deposited in the California Academy of Sciences. *Paratypes*: 12 males: Clarion Island, Revillagigedo Islands, Mexico, April 26–28, 1925; H. H. Keifer, collector. Eight deposited in the California Academy of Sciences, four in the American Museum of Natural History. Twelve females: same data as above.

Thyanta setigera Ruckes, new species

(Figures 7, 8)

Allied to *T. perditor* (Fabricius) but averaging only two-thirds the size of that species. Narrowly obovate, dull green to brown olivaceous.

Head somewhat shorter than wide through the eyes (37/45), weakly sinuate before eyes; dorsal surface finely and evenly punctured, provided with a scattering of short, seta-like, porrect hairs; ocelli moderate in size, farther from inner margins of the eyes than the diameter of an ocellus. Antennal segmental ratios: 10/20/20/23/19, i.e. terminal four segments essentially subequal with segment IV the longest; segments I, II and base of III dull greenish yellow, the remainder brown to fuscous, bases of IV and V slightly paler. *Pronotum* less than three times as wide across humeri as long medially (115/41); surface coarsely punctured and transversely rugose-reticulate; each humerus terminates in a short, laterally projecting, acute tooth (not a spine as in *perditor*) which arises from the anterior corner of humerus behind which the margin of the latter is at right angles to transhumeral axis, before abruptly rounding off into postero-lateral margin of pronotum; antero-lateral margins vaguely vertically rugose and slightly arcuate and provided with a submarginal row of short seta-like hairs on propleuron; inner corner of each cicatrix provided with a fuscous spot and a transverse reddish brown band present as in *perditor*. *Scutellum* equilateral (70/70), coarsely punctured and transversely strongly rugose; frenum ends at a point about two-thirds from base, lateral margins of apical third (the tongue) subparallel, apex narrowly rounded. Elytra very uniformly and coarsely punctured, apical margin of corium sometimes provided with a notch near apical angle. *Connexivum* narrowly exposed, margins somewhat reddish or orange as in *perditor*, connexival incisures vaguely bordered with dark, more frequently not colored. *Abdominal venter* yellowish green or darker, depending on dorsal coloring; a row of small piceous or fuscous post-

spiracular points present on each side, these not as conspicuous as in *perditor*; basal as well as apical angles of abdominal segments fuscous to piceous, giving the appearance of doubleness to each marginal spot. Bases of legs concolorous with thoracic plates, tibiae and tarsi becoming darker, usually fuscous; femora and tibiae provided with numerous long seta-like hairs interspersed with shorter pile. Rostrum reaching almost to apical margin of second (first visible) abdominal segment; in *perditor* the rostrum barely surpasses the metacoxae.

Male genital segment much like that in *perditor* but proportionately smaller; parameres smaller and slightly differently proportioned (Fig. 8). Plates of the female valves indistinguishable from those of *perditor*.

Described from 24 male and 27 female specimens as follows:

Holotype male: (10 mm. long; 6 mm. across the humeri.) CHARLES ISLAND, GALAPAGOS ISLANDS, May 14, 1932; Templeton Crocker Expedition, M. Willows, collector. Deposited in the California Academy of Sciences. *Allotype female*: (10.75 mm. long; 6.1 mm. across the humeri.) Conway Bay, Indefatigable Island, Galapagos Islands, March 22, 1932; presented by the Templeton Crocker Expedition Collector. Deposited in the California Academy of Sciences. *Paratypes*: 23 Males, all from the Gallapagos Islands as follows: Indefatigable Island, June 13, 1932 (California Academy of Sciences, 4; American Museum of Natural History, 2); Jervis Island, June 6, 1932 (California Academy of Sciences, 7; American Museum of Natural History, 3); North Seymour Island, June 12, 1932 (California Academy of Sciences, 1); Chatham Island, April 16-18, 1932 (California Academy of Sciences, 1; American Museum of Natural History, 1); Albermarle Island, May 25, 1932 (California Academy of Sciences, 2; American Museum of Natural History, 1); James Island, January 9, 1932 (California Academy fo Sciences,1). 26 females all from the Galapagos Islands as follows: Indefatigable Island, June 13, 1932 (California Academy of Sciences, 3; American Museum of Natural History, 2); Jervis Island, June 6, 1932 (California Academy of Sciences, 5; American Museum of Natural History, 3); North Seymour Island, June 12, 1932 (California Academy of Sciences, 2; American Museum of Natural History, 2); Chatham Island (California Academy of Sciences, 2); Albermarle Island, November 26, 1906(California Academy of Sciences, 2); Gardner Island, April 22, 1932 (California Academy of Sciences, 2); James Island, April 4, 1932 (California Academy of Sciences, 2; American Museum of Natural History, 1).